



Issue 49 (November 2023)

Event



College of Engineering

The Bright Future Engineering Talent Hub at the College of Engineering recently held the STEM Challenge and Summer Research Internship Presentation, attended by over 100 secondary students and representatives from schools. The event also featured a donation ceremony to express appreciation to the Bright Future Charitable Foundation (the Foundation). The Hub organises various STEM activities, fostering STEM education and nurturing young talent for the engineering industry. Over 1,600 secondary students have participated in these activities in the past 2 years. Furthermore, the Hub received an additional donation of over HKD8M from the Foundation to further develop the Hub and offer scholarships for CityU engineering students.

Event



College of Engineering

The Hong Kong Monetary Authority (HKMA) has formed the Central Bank Digital Currency (CBDC) Expert Group, collaborating with the College of Engineering, City University of Hong Kong and four other local universities. This group comprises experts in various fields, such as business, computer science, economics, finance, and law, to contribute to CBDC research by exploring privacy issues and interoperability using blockchain technology. The College's involvement in the CBDC Expert Group highlights its crucial role in positioning Hong Kong as a leader in CBDC research and its commitment to fostering government-industry-academia collaboration.

Award



Departments of Biomedical Engineering and Materials Science and Engineering

Prof Kannie CHAN and Prof ZHI Chunyi have been honoured with the prestigious CityU Outstanding Research Award. This esteemed award not only celebrates their research accomplishments but also underscores the University's dedication to fostering an environment that encourages top-notch research on a global scale.

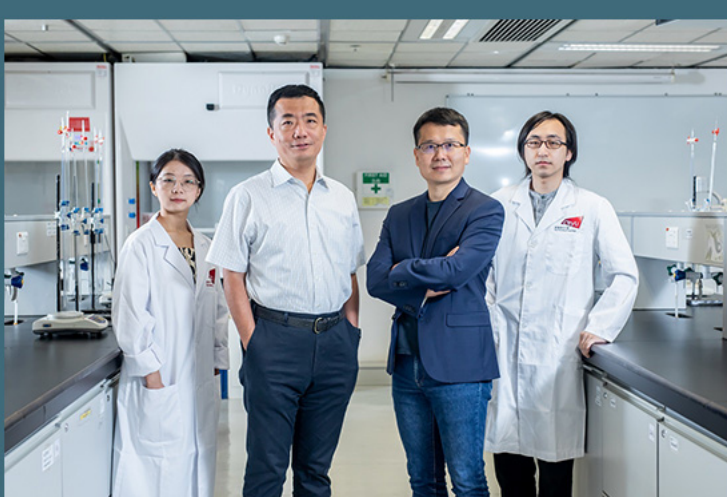
Faculty Achievement



Department of Materials Science and Engineering

A recent paper published in *Nature* by Prof HE Qiyuan and his research team sheds light on the remarkable advancements in the field of hydrogen evolution. The team's paper, titled Phase-dependent growth of Pt on MoS₂ for highly efficient H₂ evolution, highlights an intriguing finding regarding the impact of crystal phase in two-dimensional transition-metal dichalcogenides (TMDs) on their properties and functionalities.

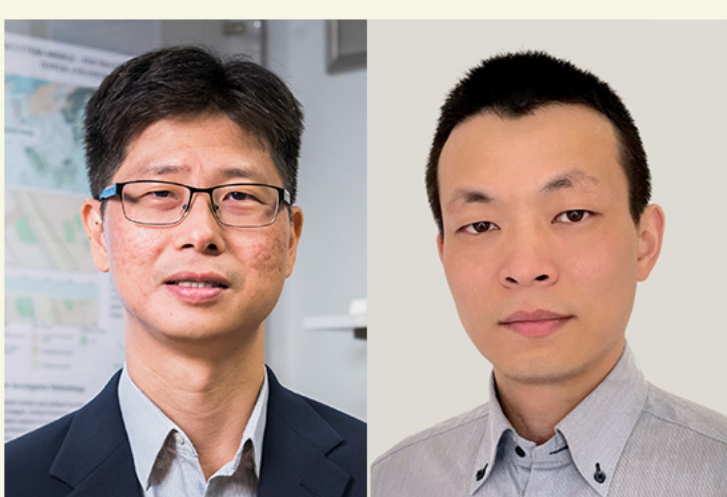
Faculty Achievement



Department of Biomedical Engineering

A team led by Prof WANG Lidai and Prof ZHU Guangyu from the Department of Chemistry pioneered Sono-sensitized Chemotherapy (SSCT). Their work under the title An Ultrasound-Activatable Platinum Prodrug for Sono-Sensitized Chemotherapy was recently published in *Science Advances*. It demonstrates how ultrasound activation enhances precision and effectiveness in eradicating deeper tumours with centimetre-range tissue penetration, and minimizing side effects. Their innovative approach holds great potential for advancing cancer treatment.

Faculty Achievement



Department of Architecture and Civil Engineering

A paper titled Development of Subsurface Geological Cross-Section from Limited Site-Specific Boreholes and Prior Geological Knowledge Using Iterative Convolution XGBoost by Prof WANG Yu and his PhD graduate, Dr SHI Chao, was bestowed the 2023 Thomas A Middlebrooks Award by the American Society of Civil Engineers. The paper examines the utilisation of iterative convolution XGBoost methodology to create accurate subsurface geological cross-sections, even when working with limited site-specific boreholes and prior geological knowledge.

Student Achievement



Department of Computer Science

A team comprising Mr Eklavya AGARWAL, Mr Vannes WIJAYA, Mr CODANGUDI-BALASUBRAMANIAN-ABHINAV and three students from other local universities emerged as the Champion at the J P Morgan's Hackathons: Code for Good 2023. Code for Good is an annual hackathon challenge for students majoring in Computer Science and Engineering, providing them an opportunity to showcase their skills and innovative ideas.

Student Achievement



Department of Electrical Engineering

Mr GAO Shuwei, under the supervision of Prof Steve WONG, won the Outstanding Paper Award at the 18th Chinese National Symposium on Radio Propagation for his paper titled A dual-band high-gain shared-aperture antenna.

Student Achievement



Department of Electrical Engineering

Supervised by Prof SUN Yanni, Mr SHANG Jiayu emerged as the champion at the IEEE (Hong Kong) Computational Intelligence Chapter's Postgraduate Student Research Paper Competition 2022-2023. His winning paper, titled CHERRY: A Computational Method for Accurate Prediction of Virus-prokaryotic Interactions Using a Graph Encoder-decoder Model, showcases an innovative approach that accurately predicts virus-prokaryotic interactions through a graph encoder-decoder model.

